

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1.-10. (Cancelled)

11. (Currently Amended) A method for isolating from a complex mixture a compound capable of binding to RPTP-alpha, comprising:

(a) attaching said RPTP-alpha or the ligand-binding portion thereof, to a solid phase matrix;

(b) contacting said complex mixture with said solid phase matrix allowing said compound to bind, and washing away any unbound material; and

(c) eluting said bound compound,
thereby isolating said compound,

wherein said RPTP-alpha has protein tyrosine phosphatase activity and comprises:

i) the amino acid sequence SEQ ID NO:1;

ii) an amino acid sequence encoded by a nucleic acid molecule that hybridizes at 42°C in 50% formamide, 5X SSC, 25 mM KPO₄, 5X Denhardt's, 10 µg/ml salmon sperm DNA and 10% sulfate followed by washing at 58°C in 0.1X SSC and 0.1% SDS to the complement of a nucleic acid molecule comprising the nucleotide sequence of SEQ ID NO: 2;

iv) the amino acid sequence of SEQ ID NO: 3; or

v) an amino acid sequence encoded by a nucleic acid molecule that hybridizes at 42°C in 50% formamide, 5X SSC, 25 mM KPO₄, 5X Denhardt's, 10 µg/ml salmon sperm DNA and 10% sulfate followed by washing at 58°C in 0.1X SSC and 0.1% SDS to the complement of a nucleic acid molecule comprising the nucleotide sequence of SEQ ID NO:4.